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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/538,566

06/15/2005

Jong Chul Ye

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06/22/2011

PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

TORRENTE, RICHARD T

ART UNIT

PAPER NUMBER

2485

NOTIFICATION DATE

DELIVERY MODE

06/22/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/538,566	Applicant(s) YE ET AL.	
	Examiner RICHARD TORRENTE	Art Unit 2485	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 March 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-8,10-13,15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-8,10-13,15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/7/11 has been entered.

Specification

The disclosure is objected to because of the following informalities: Missing headings

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.

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- (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Appropriate correction is required.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claim(s) 16 is/are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 16 recites the limitation "the bit plane" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 6-8, 10-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Puri et al. (NPL Forward Error Multicast) (IDS) in view of Zhang et al. (US 2002/0021761 A1).

Regarding claim 1, Puri discloses a method of multiple description channel coding of video data using forward error correction (see abstract), the method comprising the steps of: in a video processing system (see fig. 1), receiving input video data (see "raw video" in fig. 1).

Although Puri discloses coding a base layer bitstream and an enhancement layer bitstream (see "layered representation" in column 2, page 745) according to a fine-granular scalability coding (see multiresolution in column 2, page 745); converting the base layer bitstream and the enhancement layer bitstream into a plurality of equal priority descriptions (see "non-prioritized MD packet" in column 1, page 746); and allowing a fractional number of descriptions (see "fraction of packets" in column 1, page 746) by using partitions generated from the base and enhancement layer bitstreams (see fig. 2; see fig. 3) and a forward error correction (FEC) code (see "FEC" in fig. 1; see fig. 3) according to predetermined criteria (see "N-description" in fig. 3), it is noted that Puri does not disclose wherein the base layer bitstream and an enhancement layer bitstream are generated by determining DCT coefficients for the video data; and coding the DCT coefficients into a base layer bitstream and an enhancement layer bitstream.

However, Zhang, in the same field of endeavor, disclose a multiresolution layered representation wherein the base layer bitstream and an enhancement layer bitstream (see fig. 1) is generated by determining DCT coefficients for the video data (see ¶ [0010] and [0061]); and coding the DCT coefficients into a base layer bitstream and an enhancement layer bitstream (see fig. 1).

Given the teachings as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Zhang teachings of multiresolution layered coding into Puri multiresolution layered coding for the benefit of proper enablement of generating a multiresolution layered coding.

Regarding claims 2 and 12, Puri further discloses comprising the step of transmitting the converted descriptions layers over different transmission channels (see "multicast" in title).

Regarding claims 3 and 13, Puri further discloses comprising the step of decoding the plurality of equal priority descriptions (see "transcoder" in fig. 1).

Regarding claim 4, Puri further discloses wherein the decoding step is performed based on at least one of the plurality of equal priority descriptions (see "transcoder" in fig. 1).

Regarding claim 7, Puri further discloses comprises means for decoding at least one of the plurality of equal priority descriptions (see "transcoder" in fig. 1) wherein the reconstructed video is drift-free as long as the decoding means receives at least one plurality of equal priority descriptions (see "fraction of packets" in column 1, page 746).

Regarding claim 10, Puri further discloses wherein the plurality of equal priority partitions is generated from the base and enhancement layer (see fig. 2) and a forward error correction (FEC) code.

Regarding claim 6, the claim(s) recite analogous limitations to claims 1 and 2, and is/are therefore rejected on the same premise.

Regarding claims 8 and 15, Puri further discloses wherein the decoding means is an MPEG-4 decoder (see column 2, page 745).

Regarding claim 11, the claim(s) recite analogous limitations to claim 1, and is/are therefore rejected on the same premise.

Allowable Subject Matter

1. Claim(s) 16 is/are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of

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the base claim and any intervening claims along with overcoming the 35 U.S.C. 112, second paragraph rejection.

Response to Arguments

1. Applicant's arguments filed 3/7/11 have been fully considered but they are not persuasive. Applicant argued that Puri does not disclose "fractional number of description" because Puri discloses "N=2 descriptions". The Examiner respectfully disagrees for two reasons. First, the term "fractional number of description" can be interpreted as a fraction of a total number of a sets or data or packet of descriptions. Thus, allowing a fractional number of descriptions (see "fraction of packets" in column 1, page 746, wherein MD allows a fraction of the packet and still be able to properly decode a stream. Note that the packets comprise multiple layers). Second, the "fractional number of description", particularly, the "description" has no antecedent basis. Therefore, the "fractional number of description" is interpreted as a fraction number of any description relating to the base and enhancement layer and FEC. Thus, allowing a fractional number of descriptions (see "fraction of packets" in column 1, page 746, wherein MD allows a fraction of the packet and still be able to properly decode a stream. Note that the packets comprise multiple layers).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RICHARD TORRENTE whose telephone number is (571)270-3702. The examiner can normally be reached on M-Th: 7:30 - 6:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard Torrente/
Examiner, Art Unit 2485